#### BENCH MARK

B.M. No.	Location	Elevation					
1	Chiseled box cut on the top southwest corner of bridge STA. 313+84	810.14					

1'-54"

Limits of Existing Structure (Typ.)-

Back of W. Abut.

Sta. 313+55

Elev. 807.70

KJW

AJS

KJW

A./S

DESIGNED

CHECKED

CHECKED

DRAWN

Plate-

6" & Floor

Drain (Typ.)

Traffic Barrier

Terminal, Type 6

Std. 631031 (Typ.) -

€ F.A.P. 17

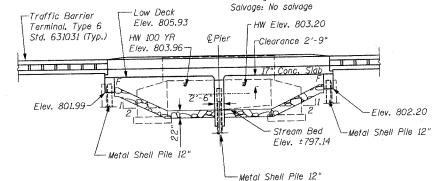
39'-2" to Out o

## **EXISTING STRUCTURE:**

Structure No. 071-0019 Sta. 313+89

Year Built: 1937 Existing Superstructure: Simple Span  $6^{l}_{2}$ " Reinforced Concrete Tee Beam Deck Slab with  $36^{\prime}$ -0" Span and  $47^{\prime}$ -6" Out to Out. Existing Substructure: Closed Abutments on Spread Footing

Existing Structure to be removed and replaced. One lane of traffic to be maintained utilizing Temporary Signals and Stage Construction.



**ELEVATION VIEW** 

32'-6<sup>3</sup>4"

-Temp. Sheet

Piling (Typ.)

68'-0" Back to Back Abutments

32'-634"

B-2 **⊕** Sta. 314+10

54' LT

-Stage Removal Lin

-Edge of Water

28'-0"

Channel Bottom

Sta. 313+79 46' RT

PLAN VIEW

65′-1′2″ € Abutment to € Abutment

#### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

#### TOTAL BILL OF MATERIAL

	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment	Cu. Yd.		81	81
Porous Grandia Embankmon	Sq. Yd.		522	522
Stone Riprap, Class A5	Sq. Yd.		522	522
Filter Fabric for use with Riprap	Each	1		1
Removal of Existing Structures - No. 2	Cu. Yd.		176	176
Structure Excavation	Each	4	1,0	4
Floor Drains	Cu. Yd.		81.1	81.1
Concrete Structures	Cu. Yd.	158	01.1	158
Concrete Superstructure	Sa. Yd.	268		268
Bridge Deck Grooving				330
Protective Coat	Sq. Yd.	330	7970	45000
Reinforcement Bars, Epoxy Coated	Pound	37030	995	995
Furnishing Metal Pile Shells 12"	Foot	<del> </del>	995	995
Driving and Filling Shells	Foot			2
Test Pile Metal Shells	Each		2	994
Temporary Sheet Piling	Sq. Ft.		994	994
Name Plates	Each	1		1-1-
Underwater Structure Excavation	Each	1	I	
Protection - Location 2				1-100
Bar Splicers	Each	120	42	162

#### -Backfill with uncompacted porous granular embankment with a gradation of CA-5 or CA-7 by Bridge Contractor after superstructure is in place. Limits shall be 1'-0" from the end of each wingwall. Construction Joints Excavation for placing Porous Granular Embankment is paid for as Structure Excavation. Approach Bridge Deck Gentechnical fabric 17" Conc. Slabfor french drains.₩ 1'-0" Min.-\ 6″ ¢ perforated drain pipe shall be situated at the

**★** Included in the cost of Porous Granular Embankment

#### SECTION THRU ABUTMENT Horizontal Dim. @ Rt. L's

bottom of an approximate 2'x2' area of porous granular embankment. The 2'x2' area shall be wrapped completely In geotechnical fabric for french drains. Extend pipe parallel with the cap until intersecting with the sideslope. Pipes shall drain onto concrete headwalls (Article 601.05 of the Std. Specifications and Highway Std. 601101)\*

#### STATION 313+89 BUILT 200\_ BY STATE OF ILLINOIS FA Rte. 17 SECTION (123WPH) BR-2 LOADING HS20 STR. NO. 071-0092

NAME PLATE See Std. 515001

Limits of Riprap

5′-6"

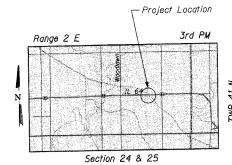
SECTION A-A

Stone Riprap Toe Anchor Detail

Stone Riprap

Class A5

Filter Fabric



I OCATION SKETCH

## WATERWAY INFORMATION

Structure/© Pier

Sta. 313+89

Elev. 807.81 Skew = 30°R.A

rBack of

F. Abut.

Sta. 314+23 Elev. 807.91 314+50

Stage

Const. Line

30' Appr. Pav't

(Std. 420401) Typ.

(Typ.)

—Limits of Riprap, Class A5

Drainage Area	nage Area = 2.47 sq. mi. Low Grade Ei				306.8 <b>©</b> Sta. 310+00				
Dromago Aroo		0	Opening Sq. Ft.		Nat.H.W.EL.	Head-Ft.		Headwater El.	
Flood	Freq.	C.F.S.	Exist.	Prop.	Exist.	Exist.	Prop.	Exist.	Prop.
 Desian	50	799	131.9	215.3	803.20	2.5	1.76	805.7	804.96
Base	100	913	153.2		803.96	2.15	1.33	806.11	805.29
Overtopping	+==	<u> </u>							
 Max. Calc.	500	1183	159.9	306.4	804.56	2.39	1.39	806.95	805.95

APPROVED FOR STRUCTURAL ADEQUACY ONLY

Rolph E. ander

#### TOTAL SHEET 10 SHEETS 40 OGLE 61 FAP 17 (123WPH) BR-2

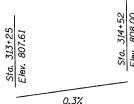
CONTRACT #64417

#### GENERAL NOTES:

- 1. Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.
- 2. The contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection.
- 3. The contractor shall drive 1 metal shell test pile in a permanent location at each abutment as directed by the engineer before ordering the remainder of the piles.
- 4. All construction joints shall be bonded.
- 5. Excavation behind existing abutment walls shall be done before removing existing superstructure. The contractor shall saw cut the existing abutments at the stage removal line before stage I removal.
- 6. Layout of the slope protection may be varied in the field to suit ground conditions as directed by the engineer.

#### INDEX OF SHEETS

- 1. General Plan, Notes, Index, & Quantities
- 2. Stage Construction Details
- 3. Temporary Concrete Barrier
- 4. Superstructure
- 5. Superstructure Details
- 6. East and West Abutments
- 7. East and West Abutment Details
- 8. Pier
- 9. Pile Details
- 9A. Bar Splicer Assembly Details
- 10. Boring Logs



## PROFILE GRADE

F.A.P. 17 Illinois 64 (Along & Roadway)

## LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

# DESIGN SPECIFICATIONS

1996 AASHTO with 1997 thru 2002 Interims

### DESIGN STRESSES

FIELD UNITS 3,500 psi = 60,000 psi (reinforcement)

#### SEISMIC DATA

Seismic Performance Category (SPC) = A Bedrock Acceleration Coefficient (A) = 0.035 Site Coefficient (S) = 1.2



ILLINOIS DEPARTMENT OF TRANSPORTATION GENERAL PLAN, NOTES, INDEX, & QUANTITIES IL 64 OVER KILBUCK CREEK F.A.P. RTE. 17 SECTION (123WPH) BR-2 OGLE COUNTY STA. 313+89 S.N. 071-0092

DATE: 06/23/2004 SCALE:

